



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/624,865

07/22/2003

Terry Joe Hanna

6971CIP

7652

7590

06/09/2006

JOHNS MANVILLE
Legal Department
10100 West Ute Avenue
Littleton, CO 80127

EXAMINER

DEGHAN, QUEENIE S

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/624,865	Applicant(s) HANNA ET AL.	
	Examiner Queenie Dehghan	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 71-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-70, drawn to a bushing apparatus, classified in class 65, subclass 495.
- II. Claims 71-80, drawn to a method of making fibers, classified in class 65, subclass 474.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group II and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus claimed can be used to practice another and materially different process such as filtering.

3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 1731

4. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Robert Touslee on May 24, 2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-70. Affirmation of this election must be made by applicant in replying to this Office action. Claims 71-80 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

6. Drawing 11 is objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "104" has been used to designate both a linear support and a tip. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an

Art Unit: 1731

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

8. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

9. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Art Unit: 1731

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (3,628,930) or Stalego (3,810,741) in view of Hanna et al. (EP 1 193 225). Both Harris and Stalego disclose a bushing with two opposed side walls and two end walls, a tip plate having a plurality of hollow tips extending from a lower surface, the tip plate being attached to the side walls and end walls and the bushing having a boxlike shape with four interior corners (col. 2 lines 45-52 & fig. 1, col. 3 lines 45-48, 52-55 & fig. 1, respectively). Furthermore, both Harris and Stalego disclose a screen in the bushing (24, 30 in fig. 1 respectively) having a

Art Unit: 1731

plurality of screen areas containing holes through the screen and the hole area per unit screen area being different in some screen areas than in other screen areas (col. 3 lines 45-58 & fig. 3, col. 4 lines 50-51, 58-59 & fig. 3, respectively).

In addition, Stalego teach of a screen in a bushing wherein a screen area closest to each corner and end wall of the bushing has a hole area per unit screen area that is substantially greater than that of the screen areas that are closest to the centerline of the screen in Fig. 3 (col. 4 lines 58-59). Although Stalego teach a support structure made of precious metal (col. 4 lines 18-20), neither Harris nor Stalego teach of an interior support structure forming cells and supporting the tip plate. Hanna et al. teach of an interior support structure welded to a top surface of the tip plate for supporting the tip plate, and a screen in the bushing mounted very near the top of the interior support structure (col. 8 lines 55-56).

Furthermore, the interior support structure comprises a plurality of intersecting or crossing internal supports with angles between the intersecting supports at each intersection to form diamond shaped cells and attached to the sidewalls, end walls, and interior corners of the bushing and forming 47 cells located between the bottom of the screen and the top of the tip plate (figures 2, 4, and 5, [0033]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the internal support structure of Hanna et al. in the bushing of Harris or Stalego in order to offer efficient support of the tip plate while encounter hot glass.

Double Patenting

13. Claims 1, 31, and 61 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2 and 21 of copending Application No. 08/929,836, as well as the claims 25, 27, 29, and 31 of the copending application 10/421,683 in view of Stalego (3,810,741) and Hanna et al. (EP 1 193 225). Claims 1, 31, and 61 in application '865, claims 2 and 21 in copending application '836 and claims 25, 27, 29, and 31 in copending application '683 claim a bushing comprising of at a least one side wall, a tip plate, and a screen mounted in the interior of the bushing and spaced above the top of tip plate, wherein the screen has a hole area per unit screen area that is different from other screen areas. However, application '836 and '683 do not disclose the shape of the bushing or an interior support structure. Stalego discloses a bushing with two opposed side walls and two end walls, a tip plate having a plurality of hollow tips extending from a lower surface, the tip plate being attached to the side walls and end walls and the bushing having a boxlike shape with four interior corners (col. 3 lines 45-48, 52-55 & fig. 1). Furthermore, Stalego discloses a screen in the bushing (30 in fig. 1) having a plurality of screen areas containing holes through the screen and the hole area per unit screen area being different in some screen areas than in other screen areas (col. 4 lines 50-51, 58-59 & fig. 3). Stalego fails to teach an interior support structure forming cells and supporting the tip plate. Hanna et al. teach of an interior support structure welded to a top surface of the tip plate for supporting the tip plate, and a screen in the bushing mounted very near the top of the interior

Art Unit: 1731

support structure (col. 8 lines 55-56). Furthermore, the interior support structure comprises a plurality of intersecting or crossing internal supports with angles between the intersecting supports at each intersection to form diamond shaped cells and attached to the sidewalls, end walls, and interior corners of the bushing and forming 47 cells located between the bottom of the screen and the top of the tip plate (figures 2, 4, and 5, [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the internal support structure of Hanna et al. and the screen of Stalego in the bushing of present application (No. '865) order to offer efficient support of the tip plate while encounter hot glass and filter out contaminants of the melted glass.

14. This is a provisional obviousness-type double patenting rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Queenie D hghan whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Q Dehghan


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700